Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Spring 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

Summer **

Fall

Spring

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
	** Non-receipt of Sumn Reports may effect of			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rate	e ratings are not deterr d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ation and maintenance de tended to be an indiction	
Comments				

Unit Cover Sheet

Spring 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles
Unit No. 01 Feather River	Right	5.11

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/22/2018 - 3/22/2018			
DWR Inspector	Sterling York			
Accompanied By	Steve Beckley			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Operations & Maintenance Manuals				0		0
пеш					٥		0
DWR ID DWR_MA0003_01_s _ 2013_4							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
Sutter Yard has a copy of the O&M manuals.							

No Photos

LM Start		Rating **	Α	Issue No.		6		
LM End		Issue Type +	Ma	Location *		N/A		
Category Earthen Levee				GPS La	GPS Latitude/Longitude			
				Start		End		
Item	Emergency Supplies &			0		0		
пеш	Equipment				0		0	
DWR ID	DWR_MA0	003_01_s _ 201	13_6					
		Comn	nent Cod	de				

No Photos

Inspector Comment
The Sutter Yard has adequate flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		7		
LM End		Issue Type +	Ma	Location *		N/A		
Category	Catagoria Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Flood Pre	paredness &		0		0		
пеш					0		0	
DWR ID	DWR_MA0	003_01_s _ 201	3_7					
		Comn	nent Cod	le				
	Inspector Comment							
The Sutter	The Sutter Yard has received flood fight training.							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.01	Rating **	Α	Issue No.		11		
LM End	5.11	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetation			38.8980)52°	38.950950°		
пеш				-121.617932 °		-121.585779°		
DWR ID DWR_MA0003_01_s _ 2018_11								
		Comn	nent Cod	le				
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	pes	and		
easements	3.							
Inspector Comment								
Annual vegetation is well maintained, Spring 2018.								



View looking upstream landside of the well maintained vegetation, Spring, 2018.

	•	Α	Issue No.		12	
5.11	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Vegetation		38.898051 °		38.950950 °		
			-121.6179	31 °	-121.585779 °	
DWR ID DWR_MA0003_01_s _ 2018_12						
,	Earthen L	Earthen Levee	Earthen Levee Vegetation	### GPS Land	### GPS Latitude Start	

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is well maintained, Spring 2018.

Photo 1 of 1: SP_2018_MA0003_195_12_20180402_00028.jpg



View looking upstream waterside of the well maintained vegetation, Spring, 2018.

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

+ Issue Type

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.69	Rating **	М	Issue No.		17
LM End	0.69	Issue Type +	Ма	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		38.90335	2 °	38.903352 °
пеш			-121.60782	9°	-121.607829 °	
DWR ID DWR_MA0003_01_s _ 2017_17						

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

A large hole on the lanside that look to be from a large animal needs to be repaired, Fall 2017.



View of the existing animal hole that is on the outside edge of the landside patrol road needs to be repaired. It is outside the levee prizim, but should be monitored, Fall 2017.

LM Start 0.69 Rating ** M Issue No. 17 (cont) LM End 0.69 Issue Type + Ma Location * LS

Photo 2 of 3: SP_2018_MA0003_195_17_20180302_00008.jpg



The existing animal hole that is on the outside edge of the landside patrol road does not appear to have any recent animal activity, Fall 2017.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.69	Rating **	М	Issue No.		17 (cont)	
LM End	0.69	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee	GPS La	e/Longitude			
Calegory				Start		End	
Item	Animal Co	ontrol		38.9033	52 °	38.903352	٥
пеш				-121.60782	29°	-121.607829	0
DWR ID	DWR_MA0	003_01_s _ 201	7_17				

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

A large hole on the lanside that look to be from a large animal needs to be repaired, Fall 2017.

Photo 3 of 3: SP_2018_MA0003_195_17_20180302_00009.jpg



View of a large hole on the landside that look to be from a large animal, Spring 2017.

LM Start	0.78	Rating **	A/W	Issue No.		Issue No.		140							
LM End	0.78	Issue Type +	Ma	Location *		Location *		Location *		Location *		Location *		LS	
Category	Earthen Levee				atitud	e/Longitude									
Calegory				Start		End									
Item	Animal Co	ontrol		38.9033	39°	38.903339	0								
пеш			-121.6062	09°	-121.606209	0									
DWR ID	VR ID DWR_MA0003_01_f _ 2014_140														

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

The rodent hole on the landward toe road approximately 8" in diameter tis no longer there but should be monitored. Fall 2017.

LM Start	0.78	Rating **	A/W	Issue No.	140 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 1 of 2: SP_2018_MA0003_195_140_20180302_00013.jpg



View of were the rodent hole has been repaired, Fall 2017.

Photo 2 of 2: SP_2018_MA0003_195_140_20180302_00014.jpg



This photo was taken from the landward levee slope near the toe road facing north looking at an approximately 8" rodent hole. Fall 2016.

Location Rating + Issue Type LS: Land Side Ma : Maintenance Deficiency N: Not Inspected/Rated N/A: Not Applicable : Acceptable WS: Water Side : Minimally Acceptable C : Corrected Ob: Design & System Obsolescence CR: Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		141
LM End	0.81	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	38.9032	64°	38.903264 °
пеш				-121.6056	98 °	-121.605698 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51474 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM

Photo 1 of 3: UCIP_SP_2018_51474_64649.jpg



Concrete headwall with walkway and slide gates at LS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		141 (cont)
LM End	0.81	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	38.9032	64 °	38.903264 °
пеш				-121.6056	98 °	-121.605698°
DWR ID						

Comment Code

Inspector Comment

FS_ID:51474
DS_ID:17092
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM



Concrete U shaped headwall on WS toe filled in with Sandbags. 16-inch pipe shown over top of headwall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		141 (cont)
LM End	0.81	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	38.90326	1°	38.903264 °
пеш				-121.605698	3°	-121.605698 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51474 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM



Concrete U shaped headwall filled in with sandbags on WS toe. Flap gates appear to be missing and water readily flows through the sandbags from LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		142	
LM End	0.81	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS La	GPS Latitude/Longitude			
Calegory				Start	End		
Item	DWR UCI	P LMA Respo	nsibility	38.9032	64 °	38.903264°	
пеш				-121.60569	98 °	-121.605698°	
DWR ID							
Comment Code							

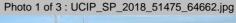
Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:05:05 AM





Concrete headwall, slidegates, and metal walkway on LS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		142 (cont)
LM End	0.81	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	e/Longitude	
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	38.90326	4 °	38.903264
пеш				-121.60569	3°	-121.605698
DWR ID						

Comment Code

Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:05:05 AM



Concrete U shaped headwall on WS toe filled with sandbags.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	0.81	Rating **	U	Issue No.		142 (cont)	
LM End	0.81	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS Lat	GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	38.90326	4 °	38.903264°	
пеш				-121.60569	8 °	-121.605698 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 2 of 2: 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete ""U"" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955, (Station 982+00)].

FS Date: 4/12/2017 9:05:05 AM



Flap gates appear to be missing from U shaped headwall. Sandbags fill headwall but water flows heavily from LS.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143
LM End	2.17	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		38.9117	34 °	38.911734°
пеш					06 °	-121.586106°
DWR ID						

Comment Code

Inspector Comment

FS ID:51477 DS_ID:17088 EP NO: 3284 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch reinforced concrete irrigation culvert through the levee, approximately 28 feet below the crown. Transition between vault on the waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate located on the landside (LS) at concrete headwall. Flap gate in concrete vault on the WS at terminal of pipes from pump structure in floodway. Pipes from pump station located on the WS are no longer connected. (Permit No. 3284, 1960 - Richards). [Additional Reference(s): DWR Levee Log, 2005].

Photo 1 of 3: UCIP_SP_2018_51477_64668.jpg



32X32 box culvert on LS toe in Concrete U shaped channel with slide gate.

FS Date: 4/12/2017 9:06:41 AM

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Page 11 of 18

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143 (cont)		
LM End	2.17	Issue Type +	En	Location *				
Category	Suppleme	Supplemental			GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP Field Study		38.91173	34 °	38.911734°		
пеш)6 °	-121.586106 °		
DWR ID								

Comment Code

Inspector Comment

FS_ID:51477 DS_ID:17088 EP_NO: 3284 Repair Type: Urgent Crossing Status: Found

FS Date: 4/12/2017 9:06:41 AM

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch reinforced concrete irrigation culvert through the levee, approximately 28 feet below the crown. Transition between vault on the waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate located on the landside (LS) at concrete headwall. Flap gate in concrete vault on the WS at terminal of pipes from pump structure in floodway. Pipes from pump station located on the WS are no longer connected. (Permit No. 3284, 1960 - Richards). [Additional Reference(s): DWR Levee Log, 2005].

Photo 2 of 3: UCIP_SP_2018_51477_64667.jpg



8-foot X 14-foot concrete box on WS toe with slide gate and 3 abandoned flap gates.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143 (cont)	
LM End	2.17	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P Field Study		38.9117	34°	38.911734	٥
пеш					06 °	-121.586106	٥
DWR ID							

Comment Code

Inspector Comment

FS ID:51477 DS_ID:17088 EP NO: 3284 Repair Type: Urgent Crossing Status: Found

FS Date: 4/12/2017 9:06:41 AM

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch reinforced concrete irrigation culvert through the levee, approximately 28 feet below the crown. Transition between vault on the waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate located on the landside (LS) at concrete headwall. Flap gate in concrete vault on the WS at terminal of pipes from pump structure in floodway. Pipes from pump station located on the WS are no longer connected. (Permit No. 3284, 1960 - Richards). [Additional Reference(s): DWR Levee Log, 2005].

Photo 3 of 3: UCIP_SP_2018_51477_64666.jpg



Pumping plant on WS toe at small slough. Pipes no longer connected to concrete box on WS toe.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	2.18	Rating **	С	Issue No.		15
LM End	2.18	Issue Type +	Ма	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory						End
Item	Trim / Thi	n Trees		38.911869	°	38.911869
пеш				-121.586093	٥	-121.586093
DWR ID	DWR_MA0	003_01_s _ 201	5_15			

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Tree is at a turnout and not in the levee, limbs are trimmed for access and visibility.

No Photos

LM Start	2.18	Rating **	A/W	Issue No.		18
LM End	2.18	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Animal Co	ontrol		38.9118	69°	38.911869 °
пеш				-121.5860	93 °	-121.586093 °
DWR ID	DWR MA0	003_01_s _ 201	5 18			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No animal activity, Fall 2017.



View of rodent holes that need to be backfilled, No evidence of rodents during inspection. Fall 2016.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	3.18	Rating **	С	Issue No.		10	
LM End	4.10	Issue Type +	Ob	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		38.92568	3°	38.936807	0
пеш				-121.58518	4 °	-121.588941	0
DWR ID	DWR_MA0	003_01_f _ 201	7_10				

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:60

Site Designation:101-1 Repair Type: Seepage

Rating:

Field Date: 03/22/2018

Notes: Levee that was under construction in Fall 2017 has been brought up to grade and has been rocked for all weather access, Spring

2018.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	3.78	Rating **	М	Issue No.	144	
LM End	3.78	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.93248	2°	38.932482 °
пеш				-121.59100	5°	-121.591005 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51481 DS_ID:17087 EP_NO: 1730

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Big dig out/depression still present at the LS toe. Pipe is set to be replaced during the SBFCA project so depression should be repaired then. (DWR Sutter Yard-AFreitag)10/10/2016 Depression is still present at the LS toe but appears that it was dug out on purpose.(DWR Sutter Yard afreitag)4/18/2016 Big depression on LS toe along the pipe alignment. 5/12/2015 Crossing appears to be in good condition. No noticeable issues to report.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection. FIELD_STRUCT_DESC: 12-inch asphalt coated steel irrigation pipe through the levee, 4.5 feet below the crown. Gate valve and pump located on the waterside (WS). 24-inch concrete standpipe located on the landside (LS) toe has been degraded to ground elevation and filled in with soil. Pipe remains intact. Steel tower over pump is located on the WS. (Permit No. 1730, 1959 - Robert L. Crandall). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 4/12/2017 9:16:41 AM

LM Start	3.78	Rating **	М	Issue No.	144 (cont)
LM End	3.78	Issue Type +	En	Location *	



Pipe, pump, and tower on WS slope/toe.

Photo 2 of 3: UCIP_SP_2018_51481_64671.jpg



Pipe at LS shoulder showing exposed concrete cutoff wall.

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	3.78	Rating **	М	Issue No.	144 (cont)		
LM End	3.78	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory						End	
Item	DWR UC	IP Field Study		38.93248	32°	38.932482	0
пеш				-121.5910)5 °	-121.591005	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:51481 DS_ID:17087 EP_NO: 1730

Repair Type: Non-Urgent Crossing Status: Found

Crossing Status: Found
UCIP Comments: 4/11/2017 Big dig out/depression still present at the
LS toe. Pipe is set to be replaced during the SBFCA project so
depression should be repaired then. (DWR Sutter YardAFreitag)10/10/2016 Depression is still present at the LS toe but
appears that it was dug out on purpose. (DWR Sutter Yard afreitag)4/18/2016 Big depression on LS toe along the pipe
alignment. 5/12/2015 Crossing appears to be in good condition. No
noticeable issues to report.11/17/2014 Same as last
inspection.5/14/2014 Same as last inspection.10/30/2013 Same as
last inspection.5/21/2013 SBFCA project recommends replacing in
accordance with title 23. Same as last inspection.
FIELD_STRUCT_DESC: 12-inch asphalt coated steel irrigation pipe
through the levee, 4.5 feet below the crown. Gate valve and pump

through the levee, 4.5 feet below the crown. Gate valve and pump located on the waterside (WS). 24-inch concrete standpipe located on the landside (LS) toe has been degraded to ground elevation and filled in with soil. Pipe remains intact. Steel tower over pump is located on the WS. (Permit No. 1730, 1959 - Robert L. Crandall). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/12/2017 9:16:41 AM

Photo 3 of 3: UCIP_SP_2018_51481_64670.jpg

Pump at WS toe with tower over top and concrete U shaped headwall.

LM Start	4.15	Rating **	М	Issue No.		1	
LM End	4.18	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory		Start				End	
Item		ACE Erosion S	Survey,	38.9374	51 °	38.937937	0
пеш	DRAFT			-121.5885	12 °	-121.588471	0
DWR ID	DWR_MA0	003_01_s _ 201	16_1				
Comment Code							

Inspector Comment

2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_R]

Photo 1 of 2: SP_2018_MA0003_195_1_20180302_00001.jpg



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	03/22/2018 03/22/2018	Sterling York

LM Start	4.15 Rating ** M		Issue No.		1 (cont)		
LM End	4.18	Issue Type +	Ma	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	2015 USACE Erosion Survey,			38.9374	51 °	38.937937 °	
пеш	DRAFT		-121.5885	12 °	-121.588471 °		
DWR ID	DWR_MA0003_01_s _ 2016_1						
Comment Code							

Inspector Comment

2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_Ř]

Photo 2 of 2: SP_2018_MA0003_195_1_20180302_00002.jpg



USACE 2013 Photo #2

LM Start	4.71	4.71 Rating ** M		Issue No.		2
LM End	4.76	Issue Type +	Ma	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory		Start		End		
Item	2015 USACE Erosion Survey, DRAFT			38.9451	88°	38.945958
item				-121.5860	96 °	-121.586394
DWR ID	DWR_MA0003_01_s _ 2016_2					

Μ

Ма

Rating **

Issue Type +

LM Start

LM End

4.71

4.76

0						_	
LM End	4.76	Issue Type +	Ма	Location *		WS	
Category	Supplemental		GPS Latitude/Longitude				
Calegory				Start		End	
Item	2015 USACE Erosion Survey, DRAFT			38.9451	88 °	38.945958	>
item				-121.5860	96°	-121.586394	>
DWR ID	DWR ID DWR_MA0003_01_s _ 2016_2						
		Comn	nent Cod	de			
		Inspecto	or Comn	nent			
		ur causing gra in 2013. [201				nk slope.	

2 (cont)

WS

Issue No.

Location *

Photo 1 of 2 : SP_2018_MA0003_	_195_2_20180302_00003.jpg



USACE 2013 Photo #1

Photo 2 of 2: SP_2018_MA0003_195_2_20180302_00004.jpg



USACE 2013 Photo #2

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement